Impacts of Perceived Risks on Internet Purchasing Intention: In case of Mongolian E-commerce Websites

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ABSTRACT: *Perceived risks are a vital role in the success of e-commerce websites. In Mongolia, few kinds of online trading websites are working successfully and continuously developing until Today. Although, Online purchasing amount of consumers is worst compared to retail shopping market. The research study focused to investigate influences of perceived risks (Product Risk, Time Risk, Financial Risk, Delivery Risk, Social Risk) on online purchasing intention of Mongolian Young Generate action. The 412 respondents were 18-34 years of age and data collection procedure the was carried out on the social network. Data analyzing method used SPSS 21 software and Reliability, Correlation, Regression analysis were used to study according to the topic. The research found that Product risk, Time risk, Financial risk most negative influence on internet purchase intentions.*

I.   INTRODUCTION

Today, the Internet already became an integral part of consumer life and has changed purchasing behavior. The online purchasing trend is increasing sharply than ever before. In 2017, E-commerce market size grew to $2.304 trillion, and a 24.8% increase compared to the past year (emarketer.com, 2018). According to Lee and Tan (2003) defined that sharply growth of e-commerce is creating a higher risk for consumer compared to traditional retail sales. It means goods of e-commerce websites can't be possible to check and has more top waiting time, higher probability of financial loss than conventional stores. Thus, consumers favorite select retail stores for purchasing than online trade. Bergeron and Yang (2005) stated that visual appearance of product or services produce greater risk and less trust for consumers and e-commerce can't provide face-to-face sales with the provider. Also, Kim and Shim (2004) mentioned effort, time, the convenience of the online purchaser is losing or wasted in case of product replacing or repairing. It means customers are more care to take direct and indirect loss related to online shopping. For example, they always fear that ordered products may be damaged, undelivered on time, different than a visual image, money ripped, etc.

Research objective: The study focused to define the relationship of the consumer's perceived risks and online purchasing intention in case of Mongolian Young Generation. To achieve research purpose, we determined following objectives:

1. To define the demographic information of online participants (gender, education, monthly income, marital status).
2. To investigate the relationship between total perceived risk and online purchasing intention
3. To measure relationships of each perceived risks (product, time, financial, delivery, social,) and online purchasing intention

II.   LITERATURE REVIEW

Perceived Risk: The understanding of perceived risk was presented by Bauer (1960) and was used more popular in marketing research. Mitchell (1999) stated that the risk is subjective expectation of loss. Similarity, the Perceived risk is situation assumptions of consumers related issues of specific products after purchasing. In other words, it is uncertainty situation with the possibility of consumer loss. According to Park and Stole (2005) defined that perceived risk is a vital role in online purchasing because consumers have physical access limitation before purchasing. Dimensions of perceived risk were introduced firstly by Peter and Tarpey (1975). It includes product, financial, time, delivery, social risks related to retail purchasing.

Financial risk is the probability of suffering a monetary loss related to consumer purchasing. (Horton, 1984).
Product risk is defined as the probability of the item fails to meet the performance requirements initially intended (Peter and Tarpey, 1975).

Privacy/Information risk is defined as the probability of having personal information disclosed as a result of online transactions (Garbarino and Strahilevitz; 2004).

Time risk is the perception that time, convenience, or effort may be wasted when a product purchased is repaired or replaced Hanjun et al., (2004).

The delivery risk is defined as the Potential loss of delivery associated with goods lost, goods damaged and sent to the wrong place after shopping (Dan et al., 2007).

Social risk refers to the perception that a product purchased may result in disapproval by family or friends (Li & Zhang, 2002).

Online Purchase Intention: The online purchase intention is determined as a plan of customers toa purchase through the e-commerce or online retail shops (EI-Ansary and Samir,2013). According to Miller and Pearson (2001) defined, the intention is consumer's plan related purchasing behavior through online or internet. Similarity, consumers desire to make a purchase using internet from different e-commerce retailers (Rahman and Hunjra, 2012). According to Pavlou (2003), The online buying intention is possible to express,s by the condition in case of an individual is willing and intends to have interaction in an internet payment.

Online purchase intention and perceived risks: According to Rongwey and TingccHsiang (2013) stated that desire of the consumer to buy grows when perceived risk of purchasing is lower. Similarity, Mitchel, and Vassos (1999) found the perceived threat of service or product has a negative relationship with purchase intention. Consumers often use risk reduction strategies to avoid tangible and intangible loss. Guseman and Derbaix (1983) defined 14 strategies of risk reduction: (1) testing the service/product before making purchasing, (2) collecting information related to specific goods, (3) Purchasing cheaper product, (4) taking the suggestion of relatives and friends, etc. Online purchasing isn't possible to give a testing opportunity for consumers, and the reason sharply increases perceived risks. According to Featherman (2001) suggests that consumer perceived risks negatively related with online purchasing intention. Consumer trust is vital in internet trading, and the faith decreases consumer perceived risk. It means customers with high internet trust have lower perceived risk compared to purchasers with lower confidence. Also, Jarvenpaa (2000) stated that Trust directly reduces consumer online perceived risks as well as it has directly affected consumer's online purchasing attitude.

III.   DATA COLLECTION & QUESTIONNAIRE

Research data was collected from 412 respondents using Social Media Network. Questionnaire design consists of two sections. The first section includes five items (Gender, Age, Education, Monthly Income, Marital Status). The second section includes 20 questions and dimensions of perceived risk consists of 19 items; purchase intention consists of five items. Table 1 shows questionnaire items related to each section or dimensions.

Table 1: Components of Questionnaire design

Components	Items
Demographic	5
Product	4
Time	3
Financial	4
Delivery	3
Information	3
Social	2
Online Purchasing Intention	5

Data Analysis: The Analysis is the process of systematically applying statistical and logical techniques to describe and illustrate, condense and recap, and evaluate data. Research study used SPSS 21 software to investigate the relationship between independent and dependent variables. Analyzing procedure consists of 4 phases. The first phase is defining demographic information of respondents. The second phase is reliability

analysis for the internal consistency of the set of items forming the scale. Third and Fourth phases include correlation analysis and multiple regression analysis for defining the relationship between variables.

Demographic information of Respondents: Below graphic shows ages of respondents and 56 percent of total participants cover 26-31 ages, and it means females of under 28 ages more actively answered compared to over 29 ages on the survey. Figure 1 shows respondent's age level.

Figure 1: Ages of Respondents
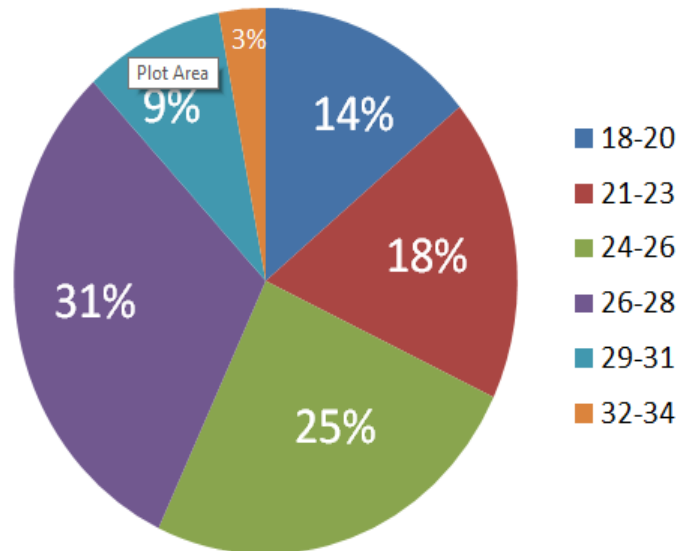
Below graphic shows gender of respondents and 62 percent of the total is female, and it means females more actively answered compared to over male on the survey. Figure 2 shows the gender of respondents.

**Figure 2: Gender of Respondents**
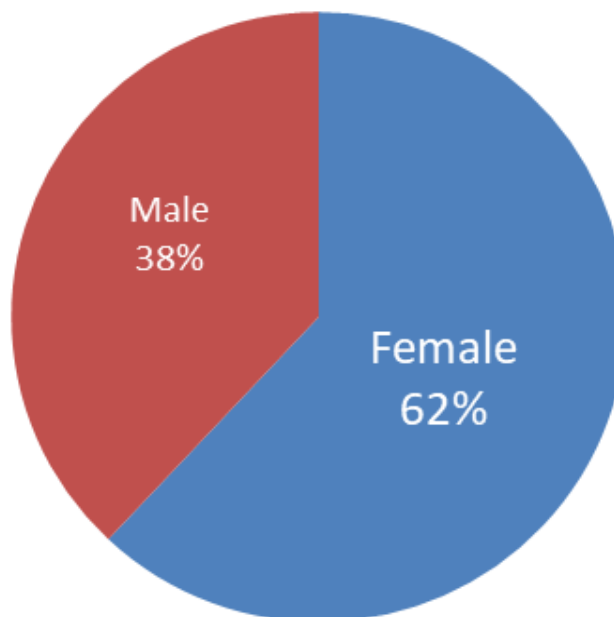
Also, the analysis considered the survey respondents by the marital status, 24% of Respondents married and others unmarried. It shows unmarried respondents actively participated in the survey compared to married participants. Figure 2 shows respondent's marital status.

Figure 2: Marital Status of Respondents
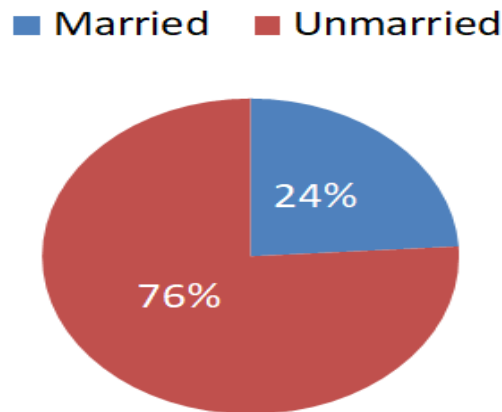
Respondent's 54% has a bachelor degree as well as 32% has Master degree.it means respondents who got bachelor and master more actively participated in the survey compared to respondents with the doctor and high school degree. Figure 3 shows respondent 's education information.

Figure 3: Education of Respondents
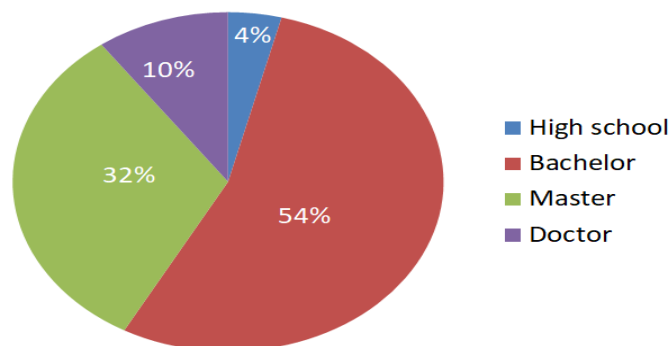
Final demographic information is the salary of respondents, and 66% of total participants earn a higher wage than Mongolian average. Highest or 28% of participants earn 1100,000-1300,000 MNT per month. Also, lowest or 7% of participants earn lower than 400,000 MNT per month.

Figure 4: Salary of Respondents
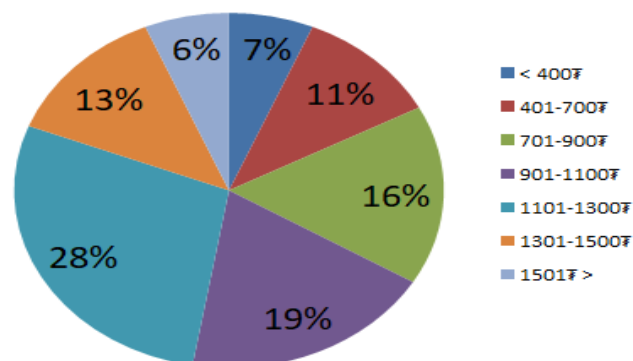
Reliability Analysis: *Reliability* in statistics and psychometrics is the overall consistency of a measure. The result expressed by Cronbach's alpha and If the alpha is near to 1, specific sampling is higher internal consistency or comfortable for analysis. Table 2 shows the result of reliability statistics.

Table 2: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.824	.809	412

In the result, Cronbach's alpha is **0.824,** and it means data exists at the high level of internal consistency and convenient for the next analysis.

Table 3: Reliability Statistic of Items

Variable	Cronbach's Alpha
Product	0.834
Time	0.796
Financial	0.754
Information	0.728
Delivery	0.881
Social	0.741
Purchase Intention	0.782

Previous researchers approved that Cronbach' value must be at least between 0.6 and 0.7 or higher. In the result, the items reliability statistics are higher than 0.6 and each item's group reach to the acceptable level. In the totally, result shows collected data variables is approved that have high flexibility.

Correlation analysis; Correlation analysis is used to measure relation power of independent and dependent variables which is more popular in research. The result of correlation shows all perceived risks has significant and negative relationships with purchase intention at 0.01 level. Product, Time, Financial, Delivery risks (r= -.642, r= -.414, p< 0.01 , r=-.543*, r=-.322*, p<0.05)has higher negative relationship with purchase intention compared to Information Risk (r=-.118, p < 0.01) and Social Risk (r=-.127, p < 0.01).

Table 4: Result of Correlation Analysis

	PR	TR	FR	IR	DR	SR	PI
Product risk	1						
Time risk		1					
Financial risk	.568**	.184*	1				
Information risk	.268**	.178**	.416*	1			
Delivery risk	.542**	.156**	.261*	.356**	1		
Social risk	.268*	.436**	.187*	.214*	.381*	1	
Purchase intention	-.642**	-.414**	-.543*	-.118**	-.322*	-.127**	1

**. significant at the 0.01 level (2-tailed).   *. significant at the 0.05 level (2-tailed).

Regression Analysis: The analysis defines the relationship of independent and dependent variables, and the result express more detailed information about relationships. The result value is represented by R –squared and it is a statistical measure of how close the data are to the fitted regression line. The table 5 showed a model summary of the analysis and adjusted R square .519 (R^2 = .522), and the model is explaining 52.2 percent of the variance.

Table 5: Model Summary

Model	R	R Square	Adjusted R Square	Std. The error of the Estimate
1	.592[a]	.522	.519	.738931

a. Predictors: (Constant), W, B, PV
b. Dependent Variable: PI

Researchers indicate if *p or importance values* is less than 0.05, the regression model statistically significantly. Table 6 showed the result of regression analysis and was explained in the table.

Table 6: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.468	.278		5.288	.02
	PR	-.628	.384	-.594	15.296	.000
	TR	-.366	.448	-.328	9.378	.028
	FR	-.518	.389	-.498	7.829	.000
	IR	-.102	.514	-.079	11.262	.012
	DR	-.145	.978	-.118	16.832	.000
	SR	-.078	.641	-.062	6.853	.050

Beta Coefficients express the relationship of variables, and the negative value shows a negative correlation. In the result, All of Beta is negative, and it approves that perceived risk have a negative relationship with online purchasing intention. From the result, Product risk (β=-0.628, p<0.01), Time risk (β = -.366, p<0.05), Financial risk (β=-.518, p < 0.01)higher negative influence on purchase intention than other perceived risks.

IV. CONCLUSION

In the recent years, Mongolian consumers more like to purchase products or service using the internet. Although, the growth of e-commerce market isn't enough compared to retail store market. It means consumers are expecting online shopping has more risk until today. Thus, research focused to define main influencing risks on the intention. From the analyzing result, Mongolian customers give more importance for Product, Time, Financial risks and the risks are main reasons of decreasing online shopping. Most of Mongolian shopping sites offer not enough warranty or guarantee of products for purchasing and if customer don't like purchased products, they need to pay refund payment. It creates a problem for customers in case of product's visual picture is different than real products. Also, Purchaser more wait to receive ordered products on hand and delivery service doesn't enough developed in Mongolia. Because it is reasoned season change (too cold in winter, etc), high traffic jam and delivery service is always delayed from the target date. One of the main problem is financial risk related product reversal, change, not receive on hand. In the each cases, Customer need to pay unnecessary expenses for the online trading company. Therefore, the reasons are producing more problems for customers. It means Mongolian e-commerce sites need to meet international standards.

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